

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Childress (US Patent No. 4,939,746; Cited in IDS).

Regarding claims 1 and 5, Childress discloses a wireless communication apparatus and a communication control method for transmitting and receiving data between a first wireless station and a second wireless station in a wireless manner (Fig. 1; col. 11, lines 38-42), wherein the first wireless station and a second wireless station (Fig. 1) comprise:

transmitting/receiving units (Fig. 5, references 560 and 562) capable of switching a plurality of wireless channels (Abstract; col. 1, lines 12-17; col. 4, lines 22-26, 35-37; col. 6, lines 35-40, e.g., if a higher priority call is directed to some unit already engaged in a communication, that unit is enabled to promptly switch operations to a new assigned working channel so as to immediately receive the higher priority call); and

communication control units (Fig. 5, reference 550; col. 13, lines 12-16) which transmit and receive the data containing information as to a second wireless channel (col. 14, line 18; col. 17, lines 40-42, e.g., working channel) different from a first wireless channel (col. 17, e.g., active control channel) via the first wireless channel with respect to the transmitting/receiving units, and switch the first wireless channel to the second wireless channel (col. 4, lines 24-25;

col. 14, lines 15-17; e.g., the called unit immediately switches its operations onto the assignee working channel).

Regarding claim 2, Childress discloses the wireless communication apparatus as claimed in claim 1, wherein

the data contains identification information specific to either the first wireless station or the second wireless station, which performs the transmission and the reception (col. 8, lines 40-42, col. 16, lines 18-23; e.g., identification codes); and

in the case that the identification information contained in the received data is made coincident with the identification information of the own wireless station, either the first wireless station or the second wireless station executes a wireless channel switching process operation based upon the data (col. 10, lines 35-41; col. 12, lines 3-12; col. 13, lines 10-26).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Childress in view of Shimura (US Patent No. 4,837,801).

Regarding claim 3, Childress discloses the wireless communication apparatus as claimed in claim 1 or 2, wherein if the communication control unit can receive the data via a set wireless channel, the communication control unit judges that the set wireless channel is under use, and

switches the set wireless channel to another communication channel (col. 14, lines 10-17; e.g., The called unit initially resides in a standby configuration where it continually monitors the digital messages appearing on the control channel outbound from the central site. If it detects a channel assignment message addressed to it as the called party (or perhaps as one party of a called group), then the called unit immediately switches its operations onto the assigned working channel).

Childress fails to specifically disclose the communication control unit seeks an unused wireless channel which is not used by another communication by repeating until the data is not received, and selects the unused wireless channel as the second wireless channel.

However, Shimura discloses the communication control unit seeks an unused wireless channel which is not used by another communication by repeating until the data is not received (col. 5, lines 50-65, e.g., The set controller 26 of the cordless telephone set in question is put into an active state to detect at a second set step SS2 whether or not the down control channel sent from the base station 11 is idle or empty at present. If the down control channel is idle, the second set step SS2 is followed by a third set step SS3 at which a calling signal is sent or transmitted to the base station 11 through the up control channel depicted at CU in FIG. 2), and selects the unused wireless channel as the second wireless channel (col. 6, lines 43-48, e.g., Responsive to the radio channel switching signal, the line control portion 15 selects another one of the down speech channels as a next down speech channel to set the same to the radio unit in question. Thus, the idle or previous speech wave is switched to the next speech wave by the radio unit in question as shown at the seventh base step SB7).

Therefore, taking the teachings of Childress in combination of Shimura as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to disclose the communication control unit seeks an unused wireless channel which is not used by another communication by repeating until the data is not received, and selects the unused wireless channel as the second wireless channel for advantages of improving systems and methods that facilitate wireless networking of electronic devices in a more efficient and cost-effective manner.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Childress in view of Kanda (EP 0536417; Cited in IDS).

Regarding claim 4, Childress discloses the wireless communication apparatus as claimed in any one of claims 1 to 3, wherein the first wireless station corresponds to an operating terminal for operating the controller in a wireless manner (col. 11, lines 44-50, e.g., The dispatch console 102 may be housed directly at the repeater station site 104 or may be remotely located via other communication facilities 106).

Childress fails to specifically disclose wherein the second wireless station corresponds to a controller for driving a machine.

However, Kanda discloses the wireless station corresponds to a controller for driving a machine (col. 1, lines 12, 38-41, e.g., a numerical control apparatus).

Therefore, taking the teachings of Childress in combination of Shimura as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by

applicant to have the wireless station corresponds to a controller for driving a machine for advantages of implementing wireless manual operating without human intervention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit
2617